

Air Soldier System Update 2011 Advance Planning Brief for Industry

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Air Warrior (AW) Currently Fielded Items











Single Place

Life Raft

Body Armor

GEN 3 **Primary** Survival **Gear Carrier** (PSGC)

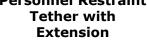


Holster

Flotation Collar



Personnel Restraint Tether with Extension







Go-Bag w/integrated **Hydration System**



Microclimate Cooling Garment (MCG) reduces heat casualties



Platform-mounted Microclimate Cooling Unit (MCU)



Aircrew Survival Egress Knife





Air Soldier System Objectives



- Reduce bulk and weight to enhance Mobility, Performance, and Mission Effectiveness
- Integrate and optimize the full suite of Aviation Life Support Equipment to improve Mission Effectiveness, Safety, Survivability, and Situational Awareness
- Improve the ability to safely and effectively operate in degraded visual environments to reduce injuries and fatalities
- Significantly increase the ability to effectively operate in full MOPP and extreme temperatures



First delivery to the field scheduled for FY13



Acquisition Strategy



- Air SS subsystems and components are under separate development and production contracts
- Competitive RDTE contracts
- Procurement of Tech Data Packages for competitive production contracts

Incremental development allows for rapid fielding of near-term technologies.

Initial Capability (1a)



5-10% Reduction in Bulk and Weight

Modular Integrated Helmet and Display System (MIHDS):

- 15-50% Improvement in crash attenuation
- Increased Field of View (FOV)
- 3D Audio with integrated head tracker
- Common color helmet mounted display with enhanced flight and DVE symbology
- Integrated CB eye/respiratory protection

Suite of Integrated Personal Electronics:

- Modular electronics architecture
- Single/common user interface
- A/C mounted mission display module
- Partial implementation of universal power
- Wearable cooling for non rated crew
- Enhanced features including additional messaging, terrain and obstacle awareness/warnings and weather
 - * Red font indicates partial implementation
 - ** Grey font indicates deferred capability



Wide (>90°) FOV Night **Vision Device**

Enhanced Laser Eye Protection

Fully Integrated Layered Clothing Ensemble (LCE):

- · Duty Uniform with lightweight cooling vest
- Lightweight CB protection with integrated liquid waste management capability
- Lightweight CB and immersion protective garments
- Integrated contact injury protection

Integrated Protective Equipment:

- Lightweight soft body armor insert
- Integrated gear carriage and body armor system
- Optimized/standardized survival items (bulk reduction)
- Elimination of body worn raft
- Fully integrated flotation system
- Lightweight composite emergency breathing device and oxygen system

IOC: FY 2013

Capability Insertion (1b)



15-20% Reduction in Bulk and Weight



Modular Integrated Helmet and Display System (MIHDS):

- 15-50% Improvement in crash attenuation
- Increased Field of View (FOV)
- 3D Audio with integrated head tracker
- Common color helmet mounted display with enhanced flight and DVE symbology
- Integrated CB eye/respiratory protection

Suite of Integrated Personal Electronics:

- Partial implementation of modular electronics architecture
- Single/common user interface
- A/C mounted mission display module
- Universal power source
- Wearable cooling system for non rated crew
- Enhanced features including additional messaging, terrain and obstacle awareness/warnings and weather
 - *Red font indicates partial implementation
 - **Blue font indicates 1b items
 - *** Grey font indicates deferred capability



IOC: FY 2016

Wide (>90°) FOV Night Vision Device

Enhanced Laser Eye Protection

Fully Integrated Layered Clothing Ensemble (LCE):

- Duty Uniform with active heating and cooling
- Lightweight CB protection with integrated liquid waste management capability
- Lightweight CB and immersion protective garments
- Integrated contact injury protection

Integrated Protective Equipment:

- Lightweight soft body armor insert
- Integrated gear carriage and body armor system (further reduces layering)
- Optimized/standardized survival items
- Elimination of body worn raft
- Fully integrated flotation system
- Lightweight composite emergency breathing device and oxygen system

Air Soldier Full Capability



25-30% Reduction in Bulk and Weight



Modular Integrated Helmet and Display System (MIHDS):

- 15-50% Improvement in crash attenuation
- Increased Field of View (FOV)
- 3D Audio with integrated head tracker
- Common color helmet mounted display with enhanced flight and DVE symbology
- Integrated CB eye/respiratory protection

Suite of Integrated Personal Electronics:

- Modular electronics architecture
- Single/common user interface
- · Aircraft-mounted mission display module
- Universal power source
- Wearable cooling for non rated crew
- Enhanced features including additional messaging, terrain and obstacle awareness/warnings, and weather



Wide (>90°) Field Of View Night Vision Device

Enhanced Laser Eye Protection

Fully Integrated Layered Clothing Ensemble (LCE):

- Duty Uniform with active heating and cooling
- Lightweight CB protection with integrated liquid waste management
- Lightweight CB and immersion protective garment
- Integrated contact injury protection

Integrated Protective Equipment:

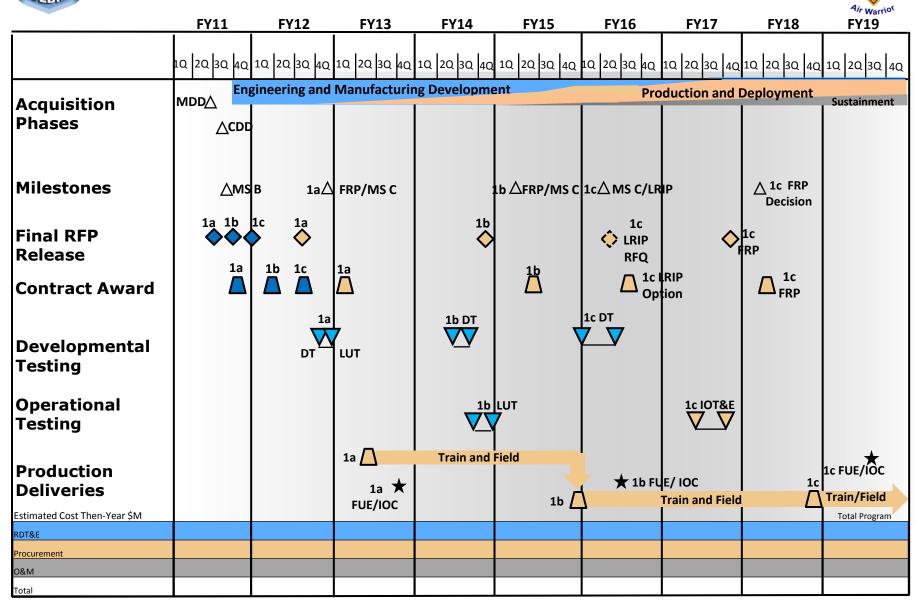
- Lightweight soft body armor insert
- Integrated gear carriage and body armor system
- Optimized/standardized survival items
- Elimination of body-worn raft
- Fully integrated flotation system
- Lightweight composite emergency breathing device and oxygen system

IOC: FY 2019



Air SS Program Plan and Strategy







Questions



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